AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

÷

Claims 1-17 (cancelled)

- 18. (new) A nucleic acid encoding for a protein with endoribonucleasic activity wherein said protein with endoribonucleasic activity is characterized in that it is polyU and single filament specific, Mn⁺⁺ ions dependent and able to release 2'-3' cyclic phosphate and 5'OH ends cleavage products.
- 19. (new) The nucleic acid according to claim 18 substantially including SEQ ID No 1 nucleotide sequence, functional homologs thereof or a complementary sequence thereto.
- 20. (new) A recombinant vector able to express effectively the inventive nucleic acid in prokaryotes according to claim 18.
- 21. (new) The recombinant vector able to express effectively the inventive nucleic acid in eukaryotes according to claim 18.
- 22. (new) A protein with endoribonucleasic activity characterized in that it is polyU and single filament specific, Mn⁺⁺ ions dependent and able to release 2'-3' cyclic phosphate and 5'OH ends cleavage products or functional portions thereof.

- 23. (new) The protein according to claim 22 encoded by nucleic acid according to a nucleic acid encoding for a protein with endoribonucleasic activity wherein said protein with endoribonucleasic activity is characterized in that it is polyU and single filament specific, Mn⁺⁺ ions dependent and able to release 2'-3' cyclic phosphate and 5'OH ends cleavage products.
- 24. (new) The protein according to claim 23 comprises SEQ ID No 2 amino acid sequence.
- 25. (new) A method for analyzing and/or detecting biomolecules by analytic and/or synthetic applications comprising analyzing and/or detecting said biomolecules with the protein with endoribonucleasic activity according to claim 22.
- 26. (new) The method according to claim 25 wherein the analytical applications are selected form the group consisting of RNA sequencing, point mutation detection, RNA molecular digital fingerprinting determination, RNA structural analysis, Rnase protection assays.
- 27. (new) The method according to claim 25 wherein the synthetic applications consist of RNA degradation for the preparation of biological macromolecules.
- 28. (new) The method according to claim 27 wherein biological macromolecules are selected form the group consisting of c-DNA, plasmid DNA, genomic DNA and recombinant protein.

- 29. (new) A method for the preparation of pharmaceutical kits for molecular analysis, comprising adding the protein with endoribonucleasic activity according to claim 22.
- 30. (new) A method for synthesizing biological macromolecules, comprising synthesizing said biological macromolecules, with the protein according to claim 22.
- 31. (new) The method according to claim 29 wherein molecular analysis is RNA analysis.
- 32. (new) The method according to claim 30 wherein biological macromolecules are selected from the group consisting of c-DNA, plasmid DNA, genomic DNA and recombinant protein.
- 33. (new) Pharmaceutical kits for molecular analysis of nucleic acids, including the protein with endoribonucleasic activity according to claim 22.
- 34. (new) Pharmaceutical kits for synthesis of biological macromolecules, including the protein with endoribonucleasic activity according to claim 22.